

REMARKS

Claims 1, 3 to 20, 22 to 25, 27 to 32, 34 and 35 are pending in this application of which claims 1, 10, 18, 25 and 32 are the independent claims. Favorable reconsideration and further examination are respectfully requested.

Claims 1, 4 to 6, 8 to 20, 23 to 25 and 27 to 32 were rejected under 35 U.S.C. § 103(a) as being obvious over Ohta et al. (U.S. Patent Application Publication Number 2002/0083317 hereinafter "Ohta") in view of Tardo et al. (U.S. Patent Number 7,082,534). Claims 3, 22, 27, 34 and 35 were rejected under 35 U.S.C. § 103(a) as being obvious over Ohta in view of Tardo and in further view of Yoaz et al. (U.S. Patent Number 6,697,932 hereinafter "Yoaz"). Claim 7 was rejected under 35 U.S.C. § 103(a) as being obvious over Ohta in view of Tardo and in further view of Corder et al. (U.S. Patent Number 7,069,447).

Claim 1 is directed to a processor. The processor includes a crypto unit including a cipher core configured to cipher data received, authentication cores configured to authenticate the ciphered data and processing contexts each configured to process at least one data packet at a time and to store cipher keys and algorithm context associated processing the at least one data packet. At least two authentication cores each implements a different authentication algorithm. The processor also includes an authentication buffer configured to store the ciphered data and provide the ciphered data to the authentication cores each in an amount based on the corresponding authentication algorithm implemented. The authentication buffer includes a

number of buffer elements corresponding to a number of processing contexts and the number of processing contexts being independent of a number of authentication cores.

The applied art is not understood to disclose or to suggest the foregoing features of claim 1. In particular, the Ohta reference does not disclose or suggest processing contexts, each configured to process at least one data packet at a time and to store cipher keys and algorithm context associated with processing the at least one data packet much less that the authentication buffer includes a number of buffer elements corresponding to a number of processing contexts and the number of processing contexts being independent of a number of authentication cores (see, for example, FIGS. 2 and 3 and page 5, lines 4 to 22 of Applicants' specification).

The Examiner has indicated that "plural cipher processing units" and "different cipher algorithms used to encrypt/decrypt data the data" "correspond to the 'plurality of processing contexts'" (see page 3 of the Office Action). Applicants respectfully submit that this is inconsistent with the Examiner's subsequent statements that with respect to a number of buffer elements corresponding to a number of processing contexts, the two authentication processing units are the processing contexts (see page 4 of the Office Action). The Examiner has not clearly indicated what she is defining as a processing context. Furthermore, if the authentication processing units in Ohta are the processing contexts, then the authentication processing units do not store cipher keys but rather the encryption processing units do in Ohta. Moreover, Applicants have amended the claims to specifically recite that the number of processing contexts are independent of a number of authentication cores. Therefore, Ohta does not disclose or

suggest processing contexts, each configured to process at least one data packet at a time and to store cipher keys and algorithm context associated processing the at least one data packet much less that the authentication buffer includes a number of buffer elements corresponding to a number of processing contexts and the number of processing contexts being independent of a number of authentication cores.

Independent claims 10, 18, 20, 25 and 32 include corresponding features to claim 1. Applicants submit that the Ohta reference should also be withdrawn with respect to claims 18, 25 and 32 for at least the same reasons as claim 1.

With respect to claims 3, 22, 27, 34 and 35, Applicants submit that Yoaz and the claimed invention "were, at the time of the invention was made, owned by the same person or subject to an obligation of assignment to the same person" (see MPEP §706.02(l)(1)). Yoaz was assigned to Intel Corporation (see assignment on reel 010643/frame 0974 recorded March 28, 2000). Applicants' application was assigned to Intel Corporation (see assignment on reel 014875/frame 0030 recorded December 29, 2003). Applicants respectfully request withdrawal of the § 103(a) rejection with respect to claims 3, 22, 27, 34 and 35.

For at least the foregoing reasons, Applicants request withdrawal of the art rejections.

Applicants submit that all dependent claims now depend on allowable independent claims.

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or

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concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for withdrawing the prior art cited with regards to any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

Applicants submit that the entire application is now in condition for allowance. Such action is respectfully requested at the Examiner's earliest convenience.

All correspondence should be directed to the address below. Applicants' attorney can be reached by telephone at (781) 401-9988 ext. 123.

No fee is believed to be due for this Response; however, if any fees are due, please apply such fees to Deposit Account No. 50-0845 referencing Attorney Docket: INTEL-013PUS.

Respectfully submitted,



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